TOTE VISION®

Owner's Manual
LCD-1700VRQ

Table of Content

CHAPTER 1

INTRODUCTION

BEFORE INSTALLING YOUR MONITOR

READ THIS MANUAL COVER TO COVER.

PAY ATTENTION to all WARNING and CAUTIONS

DO NOT use computer components not recommend by the manufacture

Do not attempt to service the monitor your self. If a problem occurs, contact the manufacture's authorized service center

ABOUT YOUR MONITOR

This monitor is a microprocessor-controlled, color monitor which uses a TFT LCD panel. The monitor conforms to EPA Energy Star and VESA DPMS (Display Power Management Signaling) power management standards. Our monitor also provide one option to accept the video input (like NTSC or PAL signal), you can switch these input signal through OSD and the video OSD setting please refer to the Chapter 4.

RGB MODE

This monitor is equipped with a microprocessor that identifies your computer's video mode and allows user to adjust the setting.

FACTORY-PRESET MODES

Table 1 shows standard video mode setting that have been pre-adjusted at the factory for accurate video display. These setting are stored in the monitor's memory

Table 1. Factory-Preset Modes

Mode	Resolution	H-Freq.(KHz)	V-Freq(Hz)
NEC	640x400	24.83	56.4
VGA	640x350	31.47	70
	720x400	31.47	70
	640x480	31.47	60
	640x480	37.86	72
	640x480	37.5	75
SVGA	800x600	35.16	56.3
	800x600	37.88	60.3
	800x600	48.08	72.2
	800x600	46.87	75
XGA	1024x768	48.36	60
	1024x768	56.47	70
	1024x768	60	75
SXGA	1280x1024	63.98	60
	1280x1024	80	75
Macintosh	640x480	35	66.7
	832x624	49.7	74.55
	1024x768	48.78	60
	1024x768	60.241	74.927

SPECIFICATIONS

● *LCD-1700VRQ 17" LCD Monitor*

Overall Dimension (HxWxD):	483 x 354 x 50.3 mm
Shipping Weight (G/W):	9 Kg
Effective Display area (H/V):	337.92 x 270.34 mm
Display colors:	16.7M colors
Scan Frequencies:	
Horizontal	31.47K to 80KHz
Vertical	60Hz to 75Hz
Number of Pixels:	1280x1024 pixels
Pixel pitch:	0.264x0.264 mm
Picture Tube:	17" TFT LCD panel
Power:	
Input	110-240VAC(auto-sensing)
	Frequency: 48-62Hz
Consumption	45Watts maximum (on)
RGB Connector:	15pin Mini D-sub (Standard)
BNC connector	6 x BNC connector
	4 x camera input
	1 x playback
	1 x recorder
RGB Signals:	
Video	Analog RGB 0.7Vp-p/75Ω
Sync	Separate
Display Data Channel:	
Compatibility	VESA DDC 1/2B

Compatibility: IBM and compatible, Apple
                                  Macintosh, NEC
Environmental Limits:
    Operating Temp   32° to 104°F (0° to 40°C)
    Storage Temp.   -4° to 140°F (-20° to 60°C)
    Operating Humidity   10 to 85% without condensation
    Storage Humidity   10 to 95% without Condensation
Agency Approval
    EMI   FCC-A and CE
    Safety   UL

Chapter 2

PRODUCT PACKAGE

Open the shipping carton and check the contents. If any items are missing or damaged, contact your dealer immediately.

The package should include the following items

- 8U 17" Color TFT LCD Monitor
- Accessory Box:
    1. VGA cable x 1
    2. AC to DC adapter x 1
    3. Power Cord x 1
   4. User's manual x 1

INSTALLING THE MONITOR

The monitor is equipped with an auto sensing power supply for voltage ranges from 110~240VAC, 60/50Hz. Confirm the line voltage designation on the rear panel of the monitor.

FOLLOW THESE STEPS TO INSTALL THE MONITOR

1. Before you connect the cables, make sure that the monitor and the system unit power switches are OFF

2. Plug one end of the 15pin signal cable to the monitor and the other end to the video signal connector at the rear of the system. Tighten the two screws on the cable connector on both ends, otherwise the screen will be abnormal and LED light is yellow color, not the normal green color.

3. Connect 4 cameras through BNC cable

4. Connect out BNC to recorder to record the screen

5. Connect the power to the monitor through the AC/DC adapter

CONTROL FUNCTIONS

The OSD control functions of 17" Quad display LCD monitor are located on the lower side. They are shown in the figure below and described in the following paragraphs.

```
    Menu      ∇        ∆      -       +
AV/PC Menu ?/CH1  ?/CH2 -/CH3 +/CH4  ⅃/AUTO         ⏻
```
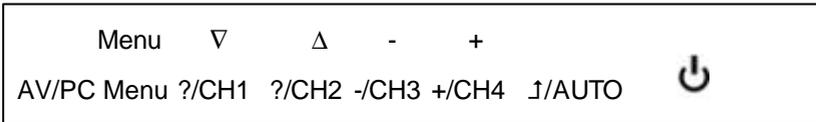
The first line is used for RGB OSD adjustment
The second line is used for security OSD adjustment

AV/PC: Switch the Screen between RGB and security screen.

The RGB control key description:

    1. ⏻   : Power Switch

    2. /+   : Decrement/Increment or Volume control

    3. ∇/∆   : Cursor Up/Down or Brightness control

    4. MENU: Activate the on screen display function

As the security control key definition, please see the chapter 4.

Chapter 3

ADJUSTING THE PC MONITOR

The LCD monitor is designed to work with a range of compatible video adapters on the market. Due to the possible deviations between these video adapters, you may make some adjustment to fit the monitor for adapter used.
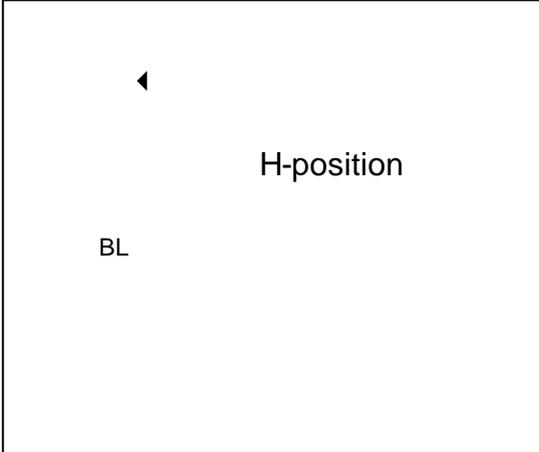
ADJUSTMENT PROCEDURE

1. First, you must activate the OSD screen through pressing the MENU key, the screen will show in the center of screen as below:
   Note: In the last paragraph, we will assume that you had already done this procedure and only explain how to change the setting.

2. Use the ∇ & Δ key to select the required adjustment item up or down.

3. Use the   & **+** key to change the control value for optimum viewing.

4. Each change that you had made will be automatically saved into memory, If the screen display garbage and you don't know how to restore to correct setting, please move arrow to "Load Value" item then pressing "-" key to load factory default.

We had two pages OSD screens; the screens are shown in OSD screen 1 and 2, if you choose the source to video not RGB, please see the next chapter.

OSD SCREEN1

1024x768	48KHz	60Hz

AUTO ADJUSTMENT

H-POSITION ------------   ◄

V-POSITION ------------

PIXEL CLOCK----------   H-position

PHASE -------------------

Back light--------------   BL

COLOR Temperature

OSD H-position -------

OSD V-position -------

Next page -------------

FIRMWARE VERSION   SXGA 5F211-5140

OSD SCREEN2

	1024x768	48KHz	60Hz

PREVIOUS PAGE ---

Brightness -------------
     RED-------------   R
    GREEN--------- G
    BLUE----------- B

Contrast --------------
    RED ------------- R   **0**   **255**

    GREEN--------- G   ///////

    BLUE ----------- B   **128**

720/640 selection----

OSD transparence -

OSD timeout------

Load Default ----------

FIREWARE VERSION   SXGA 5F211-5140

10

Adjustment Icon :

Auto-adjustment
Automatically adjust the pixel clock, H/V position and fine tune the screen to get better visual quality.
H-position
Adjusts the screen's width. The range is from 0-255.

V-Position
Adjusts the screen's height. The Range is from 0-255.

Pixel Clock
Macro-adjust the screen size. The range is from 0-255

Phase
Fine tune the screen size to get stable image after you finish the   setting. The range is 0-31

BL **Back light control**
Adjust lamp current

Color Temperature
Adjust the color temperature

Contrast
Adjust RGB contrast values simultaneously, or you can separately change each RGB value

720/640 Selection
Select the Text or Graphic mode display

OSD H-position
Move the OSD Horizontal Display location in the Screen

OSD V-position
Change the OSD Vertical Display location in the screen
Move to the next OSD screen
Move to the previous **OSD screen**
OSD transparency setting
To set the OSD display transparency mode.
Load default
OSD time out timer setting

VERTICAL & HORIZONTAL POSITION ADJUSTMENT

1. Use the ∇ & ∆ key to move the ◄ to the   ICON, then press   & **+** to move the whole screen left or right to the center position.

2. Use the ∇ & ∆ key to move the ◄ to the   ICON, then press   & **+** to move the whole screen down or up to the center position.

ADJUST THE VIEWING SCREEN SIZE

1. Use the ∇ & ∆ key to move the ◄ to the   icon , then press   & **+** to get the larger viewing size.

2. Use the ∇ & ∆ key to move the ◄ to the   icon ,then press the   & **+** key to get the stable setting.

BRIGHTNESS ADJUSTMENT

1. Use the ∇ & ∆ key to move the ◀ to the   icon, then press   &**+** to get the best brightness optimization.

Note: We provide another easily method to do the brightness adjustment. You don' t need to activate the OSD screen, just pressing the   or **+** to change the brightness value.

CONTRAST ADJUSTMENT

Adjust the display contrast

1. Use the ∇ & ∆ key to move the ◀ to the   icon, then press   & **+** to get the best brightness optimization. This setting will influence all of RGB setting, if you want to individually set each RGB setting, just move the ◀ to the next Color-R, Color-G and Color-B icon to change.

OSD DISPLAY LOCATION ADJUSTMENT

Adjust the OSD display location

1. Use the ∇ & ∆ key to move the ◀ to the   and   icon, then press   & **+** to change the OSD location as you want horizontally or vertically .

HOW TO RESTORE THE PRE-DEFINE VALUE

Restore your previous define setting

1. Use the ∇ & Δ key to move the ◂ to the icon, then press "-" will automatically load the pre-define value for each item.

2. Use this function only if you want to discard your new setting.

UNDERSTAND THE DISPLAY RESOLUTION SETTING

To understand your display mode setting.

1. In the OSD screen, you will see the Horizontal frequency (HF), Vertical frequency (VF), resolution and the monitor Firmware version (ROM LEVEL). It is automatically detected by the monitor user can not change this setting.

Note: we recommend to use auto adjustment item to fine tune the monitor setting to get the better visual quality.

CHAPTER 4

ADJUSTING THE SECURITY SCREEN SETTING

The LCD monitor is designed to work with a range of compatible video display on the market. Due to the possible deviations between these video source, you may make some adjustment to fit the monitor for video usage.

ADJUSTMENT PROCEDURE

1. First, you must activate the OSD screen through pressing the MENU key, the screen will show in the center of screen as below:

Note: In the last paragraph, we will assume that you had already done this procedure and only explain how to change the setting.

2. Use the ∇ & Δ key to select the required adjustment item up or down.

3. Use the ▬ & **+** key to change the control value for optimum viewing.

4. Any change that you make will be automatically saved into memory, If the screen display is not optimal and you don't know how to restore the correct setting, please move the arrow to "Load Value" item then press "-" key to load factory default settings.

Security OSD menu setting
When your screen is in AV mode, pressing MENU key to enter into
OSD set up menu, you will see the following screen

```
SETUP MENU
   SYSTEM
   CAMERA
   ALARM
   PLAYBACK
   VERSION
```
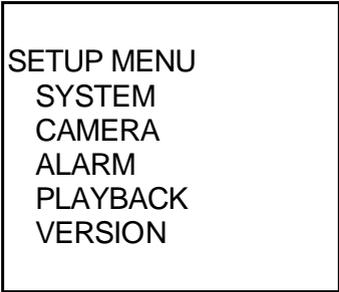
You can use ?or ? key to move the highlight bar to the desired item,
then press ⌐ to enter into the sub-menu to change setting.

The sub-menu of system is below

```
SYSTEM SETUP
   FORMAT        YY-MM-DD
   DATE          03-03-31
   TIME          14:18:13
   DWELL         1
```
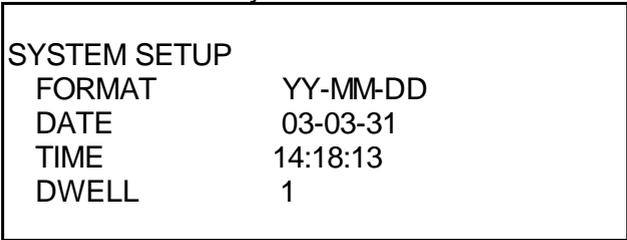
You can change the date format , current timing and dwell timing.

The sub-menu of camera is below

```
CAMERA SETUP
   CAMERA          CAM1
   BRIGHTENSS      10
   CONTRAST        22
   SHARPNESS        55
   SAT U           99
   SAT V           82
   HUE             01
   LOAD DEFAULT
```

You can set up each camera brightness, contrast, sharpness, sat U, Sat V and hue setting to the better visual quality.

The sub-menu of alarm is below

```
ALARM SETUP
   AUDIBLE         OFF/ON
```

It lets users to set up the audible on of off when camera signal is missing.

The sub-menu of Playback is

```
   CH1  CH2  CH3  CH4  PB  OUT  PWR  PW
```

We also offer the hot key to let users easily operate the LCD-1700VRQ machine.
Pressing ?/CH1 to let screen to display the channel 1 in full screen
Pressing ?/CH2 to let screen to display the channel 2 in full screen
Pressing ? /CH3 to let screen to display the channel 3 in full screen
Pressing +/CH4 to let screen to display the channel 4 in full screen
Pressing ⌐/AUTO to let screen to display the screen as Channel, 1 Channel 2, Channel 3 , Channel 4, then Channel sequentially, the duration is controlled by the DWELL setting in the system sub-menu.

Pressing   to let screen to display 4 channel quad display.

Recording the screen will always set as quad display, When you playback the screen, we offered one hot key to let user to see the full channel # display. For example, if you want to see the playback channel 1 in full screen, just pressing ?/CH1, the screen will show the full screen of channel 1.

APPENDIX

SIGNAL CONNECTOR PIN-OUT

Power Connector Pin 1	Ground
Pin 2	+12V output

RGB SIGNAL CONNECTOR

Pin 1	Analog Red Input
Pin 2	Analog Green Input
Pin 3	Analog Blue Input
Pin 4	Ground
Pin 5	Digital Ground
Pin 6	Analog Red Ground
Pin 7	Analog Green Ground
Pin 8	Analog Blue Ground
Pin 9	NC
Pin 10	Sync Ground
Pin 11	Ground
Pin 12	SDA (DDC Data)
Pin 13	H. Sync
Pin 14	V. Sync
Pin 15	SCL (DDC CLK)